

National Conference of States on Building Codes & Standards

August 3, 2005

Dr. Shyam Sunder
Acting Assistant Director, Building & Fire Research Laboratory
Lead Investigator, World Trade Center Disaster
100 Bureau Drive, Mail Stop 8610
Gaithersburg, MD 20899-8600

Dear Dr. Sunder:

On behalf of our President Cynthia Wilk, the Board of Directors, and members of the National Conference of States on Building Codes and Standards (NCSBCS), I am pleased to forward for NIST's review and consideration our association's attached response to the Final Report and Recommendations of the National Construction Safety Team on the Collapses of the World Trade Center Towers.

In preparing our response, President Wilk appointed a work group comprised of building officials representing a cross-section of our members whose jurisdictions are the site of many high-rise structures. Serving on that work group were California Acting State Architect, Richard Conrad; Illinois Building Commission Director, Jerry Crabtree; State of New Jersey Building Official, Amy Frank; and Miami-Dade County Building Commissioner, Charles Danger. In addition, the NCSBCS submission was circulated for review and input by our Board of Directors and state Delegates and members from major cities and counties across the United States.

NCSBCS appreciates NIST's review and consideration of our comments regarding your June 23, 2005, report. We wish to congratulate the members of the National Construction Safety Team, you and your colleagues at NIST for your detailed work in preparing your series of reports on the World Trade Center disaster.

NCSBCS, under the terms of our agreements with the National Governors Association and the Council of State Governments, is forwarding a copy of this submission for the consideration of their respective members.

In our submission we note several areas where NCSBCS is prepared to work cooperatively with NIST in seeking the implementation of your recommendations. In that regard, NCSBCS looks forward to participating in your upcoming September 13-15 Workshop on the World Trade Center Report and to holding follow-up discussions with NIST regarding areas of possible future cooperation.

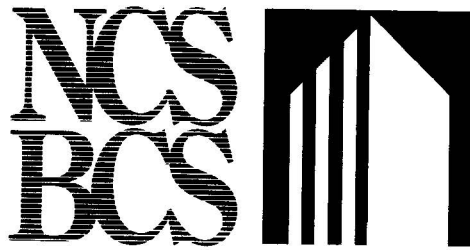
Should you have any questions concerning our submission, please do not hesitate to contact me at 703 481-2035.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert C. Wible".

Robert C. Wible
Executive Director

Cc: Raymond Scheppach, Executive Director, National Governors Association
Dan Spague, Executive Director, Council of State Governments
NCSBCS President Cynthia Wilk & Members of the NCSBCS Board of Directors



National Conference of States on Building Codes & Standards

**NCSBCS RESPONSE
TO THE
FINAL REPORT AND RECOMMENDATIONS OF THE
NATIONAL CONSTRUCTION SAFETY TEAM ON THE
COLLAPSES OF THE WORLD TRADE CENTER TOWERS
August 4, 2005**

The members of the National Conference of States on Building Codes and Standards thank the National Institute of Standards and Technology (NIST) for inviting comments on the draft final report of the National Construction Safety Team on the World Trade Center Collapse.

Representing the building code and public safety interests of the state building officials, NCSBCS has reviewed the draft report and offers for NIST's consideration several general recommendations and specific comments concerning the report's 30 recommendations.

In particular, NCSBCS wants to stress the following points concerning implementation, enforceability, affordability, and demographics.

NCSBCS GENERAL OVERARCHING COMMENTS ON THE REPORT

- Overall, NCSBCS endorses the 30 recommendations within the Final Report and urges NIST to work with the construction industry, codes and standards community, other federal agencies and with state and local governments in their implementation.
- Secondly, while the follow-up research and potential changes in the codes and standards based upon NIST's findings are of major importance, it is critical that state and local governments adopt and enforce such changes. This means that elected officials must assure that building departments are adequately funded and staffed by qualified personnel to assure that new high-rise structures and those undergoing retrofits indeed are built to conform to the upgraded codes and standards. The recent history of building safety is replete with examples of where the laws (codes) were on the books but there was inadequate enforcement of those codes.
- Thirdly, the majority of the report's recommendations are directed towards new construction. NCSBCS urges NIST and other Federal agencies to work closely with the construction community and with state and local governments to research affordable and practical application of the NIST recommendations in retrofit situations. Care must be taken not to make the retrofit of high-rise construction so expensive as to reduce the value and usability of the nation's existing stock of such structures. Such an approach must also take into account helping building owners and building departments accurately assess the risk and vulnerability of existing high-rise buildings and iconic structures and then apply appropriate enhanced safety features. The livability and viability of our urban areas depends upon the continued use of our high-rise building stock.

- Lastly, NCSBCS wishes to note that the research described in Recommendation #17 regarding determining building evacuations, needs to include addressing the special evacuation needs of high-rise residential structures, especially those that are the homes of a large number of elderly citizens. That research may result in recommendations that some of the NIST recommendations be applied to high-rise residential buildings of less than 20 stories.

NCSBCS SPECIFIC COMMENTS ON NIST RECOMMENDATIONS

- **GROUP 1 - Increased Structural Integrity (Recommendations Nos. 1 – 3)**

NCSBCS supports the implementation of all three of these increased structural integrity recommendations but wishes to stress that there is an immediate need especially for national uniformity in wind tunnel testing. A number of high-rise structures are currently under design that would benefit from such uniform testing (Recommendations #2 & #3).

- **GROUP 2 - Enhanced Fire Resistance of Structures (Recommendations Nos. 4 – 7)**

NCSBCS supports all four of these recommendations regarding enhanced fire resistance of structures.

- **GROUP 3 - New Methods of Fire Resistance Design of Structures (Recommendations Nos. 8 – 11)**

NCSBCS supports each of these four recommendations on fire resistance design. These recommendations need further study to look at their application in retrofit situations to make sure the most affordable approaches and applications are found. The federal government together with the insurance industry should consider funding such research.

- **GROUP 4 - Improved Active Fire Protection (Recommendations Nos. 12 – 15)**

NCSBCS encourages the development of these active fire protection systems and their implementation to support safer building operations. NCSBCS also endorses the incorporation of these recommendations noting that Recommendation #12 will involve changes in the nation's model codes.

- **GROUP 5 - Improved Building Evacuation (Recommendations Nos. 16 – 20)**

NCSBCS also endorses these improved building evacuation recommendations and specifically wants to stress the importance of testing different types of occupancies for evacuation speed and capabilities of their occupants. Special attention should be paid to high-rise structures housing the elderly and their special evacuation needs. Moreover, NCSBCS believes that Recommendations #18, 19 & 20 are critical.

NCSBCS wishes to acknowledge that NIST in their report has listed NCSBCS as one of the national organizations that should be involved in the implementation of Recommendation #16. NCSBCS will study ways in which it can work with other associations and organizations in developing and carrying out such a public education program.

- **GROUP 6 - Improved Emergency Response (Recommendations Nos. 21 – 24)**

NCSBCS supports each of the improved emergency response recommendations and adds that in many disaster situations, the building official may be on the scene making evaluations of the structural soundness of buildings after/during a disaster event. Among the information that is critical to be available to first responders are current as-built plans for the building, emergency contact information to the architect and engineers who designed or retrofitted the building.

NCSBCS has recommended to NIST and the Department of Homeland Security that a secure database of such designs and other critical technical information on the building (including fire rating of the structure) should be developed.

- **GROUP 7 - Improved Procedures and Practices (Recommendations Nos. 25 – 28)**

NCSBCS supports all four of the improved procedures and practices recommendations and adds that it is critical at this juncture in our nation's history for all jurisdictions and all government entities to have their buildings constructed and inspected in conformance with adopted modern building codes and standards.

This group of recommendations also can only be carried out if building departments are adequately funded and staffed and effective enforcement action is taken where warranted. In the past too many building departments had building permit and other funds taken from them to support other government functions, leaving the building department inadequately staffed with qualified professionals to carry out codes administration and enforcement functions that are necessary to protect citizens in the built environment. In this regard, NCSBCS is prepared to share with other jurisdictions across this nation samples of effective codes administration and enforcement legislation and codes funding programs that meet the above needs.

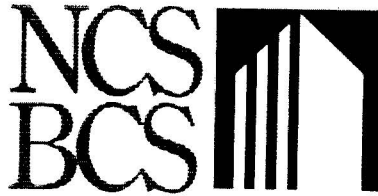
- **GROUP 8 - Education and Training (Recommendations Nos. 29 & 30)**

NCSBCS believes that education and training is another critical area that cannot be ignored. Life long learning is essential if we are to assure the public's health and life safety in our buildings.

NCSBCS CLOSING COMMENT

The Board of Directors and members of the National Conference of States on Building Codes and Standards wish to thank NIST for this opportunity to comment on the draft report and recommendations. In addition, NCSBCS wishes to note that under the terms of our cooperative agreements with the National Governors Association and the Council of State Governments, we are forwarding these comments to both organizations.

NCSBCS is available to answer any questions NIST may have regarding our comments. These may be directed to the NCSBCS Executive Director, Robert Wible, at 703 481-2035 or rwible@ncsbcs.org.



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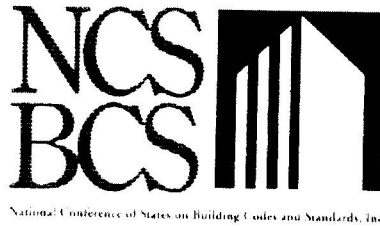
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